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09/850,082	05/08/2001	Maria Jesus Perez	60004398-1	9766

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EXAMINER

COLILLA, DANIEL JAMES

ART UNIT

PAPER NUMBER

2854

DATE MAILED: 10/06/2003

Please find below and/or attached an Office communication concerning this application or proceeding.

**Office Action Summary**

Application No.

09/850,082

Applicant(s)

PEREZ ET AL.

Examiner

Dan Colilla

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-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

**Period for Reply**

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133).
- Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

**Status**

- 1) ☒ Responsive to communication(s) filed on 07 July 2003.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

**Disposition of Claims**

- 4) ☒ Claim(s) 1-28 is/are pending in the application.
- 4a) Of the above claim(s) \_\_\_\_\_ is/are withdrawn from consideration.
- 5) ☐ Claim(s) \_\_\_\_\_ is/are allowed.
- 6) ☒ Claim(s) 1-25 and 28 is/are rejected.
- 7) ☒ Claim(s) 26 and 27 is/are objected to.
- 8) ☐ Claim(s) \_\_\_\_\_ are subject to restriction and/or election requirement.

**Application Papers**

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☒ The drawing(s) filed on 08 May 2001 is/are: a) ☒ accepted or b) ☐ objected to by the Examiner.
- Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
- 11) ☐ The proposed drawing correction filed on \_\_\_\_\_ is: a) ☐ approved b) ☐ disapproved by the Examiner.
- If approved, corrected drawings are required in reply to this Office action.
- 12) ☐ The oath or declaration is objected to by the Examiner.

**Priority under 35 U.S.C. §§ 119 and 120**

- 13) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some \* c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
2. ☐ Certified copies of the priority documents have been received in Application No. \_\_\_\_\_.
3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).
- \* See the attached detailed Office action for a list of the certified copies not received.
- 14) ☐ Acknowledgment is made of a claim for domestic priority under 35 U.S.C. § 119(e) (to a provisional application).
- a) ☐ The translation of the foreign language provisional application has been received.
- 15) ☐ Acknowledgment is made of a claim for domestic priority under 35 U.S.C. §§ 120 and/or 121.

**Attachment(s)**

- 1) ☒ Notice of References Cited (PTO-892)
- 2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
- 3) ☐ Information Disclosure Statement(s) (PTO-1449) Paper No(s) \_\_\_\_\_.
- 4) ☐ Interview Summary (PTO-413) Paper No(s). \_\_\_\_\_.
- 5) ☐ Notice of Informal Patent Application (PTO-152)
- 6) ☐ Other: \_\_\_\_\_.

**DETAILED ACTION**

***Claim Rejections - 35 USC § 103***

1. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

2. Claims 1-2 and 10 are rejected under 35 U.S.C. 103(a) as being unpatentable over Silverbrook et al. in view of Hatta.

With respect to claims 1 and 10, Silverbrook et al. discloses a method of printing with a large format printer except for the side to be printed on facing the take-up core. Silverbrook et al. discloses the method including the steps of feeding a roll paper from a feed spool 40 to a take-up spool 42 while driving the spools with a motor and gearbox assemblies 44 (Silverbrook et al., col. 7, lines 32-39). As best shown in Figures 12 and 26, Silverbrook et al. discloses that the supply spool rotates in a clockwise direction (Figure 12) and that the take-up spool rotates in a counter-clockwise direction (Figure 26). The leading edge of the paper must be advanced through the printer and inserted into the take-up spool in order for the printer to function. Furthermore, although Silverbrook et al. does not explicitly disclose that a curl in the paper is removed by the printing process, it is inherent that a certain amount of curl will be removed when the paper is unwound in one direction and rewound in the opposite direction. Hatta discloses a printer in which a print head 1 is used to print on both sides of a printing medium 4 (see last sentence of machine translation). Figures 1 and 3 of Hatta show how a take-up spool can be arranged so that both sides are printed, thus both sides of medium 4 are to be printed upon

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and one of the sides to be printed on will always face the take-up core. It would have been obvious to combine the teaching of Hatta with the method disclosed by Silverbrook et al. for the advantage of printing on both sides of the printing medium, therefore reducing the amount of printing medium needed.

With respect to claim 2, Figures 25A and 25B of Silverbrook et al. show a cutting device used for cutting the print medium.

With further respect to claim 10, Silverbrook et al. in view of Hatta discloses the method of printing as mentioned in the above prior art rejection of claim 1, and Silverbrook et al. further discloses the step of printing with printhead unit 3 (which implies a printing signal is sent to the printhead).

3. Claims 3 and 16 are rejected under 35 U.S.C. 103(a) as being unpatentable over Silverbrook et al. in view of Hatta, as applied to claims 1-2 and 10 above, and further in view of Yonekubo.

With respect to claims 3 and 16, Silverbrook et al. in view of Hatta discloses a method of printing as mentioned above except that it is not known if the activation of the take-up reel is located on a front panel of the printer. However, positioning of a power button on a panel of a printer is extremely well known as is shown by Figure 1 Yonekubo which shows a panel 4 with a power switch 5. It would have been obvious to combine the teaching of Yonekubo with the method of printing disclosed by Silverbrook et al. in view of Hatta for the advantage of a conveniently placed control for turning power to the printer on and off.

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4. Claims 4-5 and 17 are rejected under 35 U.S.C. 103(a) as being unpatentable over Silverbrook et al. in view of Hatta, as applied to claims 1-2 and 10 above, and further in view of Clark.

With respect to claims 4 and 17, Silverbrook et al. in view of Hatta discloses the method of printing as described above except for the ability to turn off a nesting feature. However, Clark discloses printing in a mode in which an array of images is printed across the width of a printing medium (a nesting feature as defined by applicant). Clark also discloses a mode in which only one image is printed across the width of the printing medium. Thus, when this second mode of printing is operating, the nesting feature is essentially deactivated. It would have been obvious to combine the teaching of Clark with the method of printing disclosed by Silverbrook et al. in view of Hatta for the advantage of maximizing the space on the printing medium and reducing paper waste. With further respect to claim 17, while it is not known if Clark discloses deactivating a nesting feature *prior* to loading the print medium, it is well-known in general to load print medium to a printer as it is needed. There does not appear to be any criticality to the order of the steps of loading a print medium and selecting or deselecting a printing mode.

With respect to claim 5, as mentioned above, Silverbrook et al. discloses a control panel 57, and there appears to be no unobvious in providing the controls of a printer in the control panel.

5. Claims 6-7 and 18 are rejected under 35 U.S.C. 103(a) as being unpatentable over Silverbrook et al. in view of Hatta, as applied to claims 1-2 and 10 above, and further in view of Kaneko et al.

With respect to claims 6 and 18, Silverbrook et al. in view of Hatta discloses the method of printing as described above except for the extended margins feature. However, Kaneko et al. discloses a margin adjusting mode which allows the enlargement of a print range by adjusting left and right margins. It would have been obvious to combine the teaching of Kaneko et al. with the method of printing disclosed by Silverbrook et al. in view of Hatta for the advantage of allowing the user more control in placement of an image on a printing medium.

With respect to claim 7, Kaneko et al. discloses that the margin switches are at the operating section of the printer.

6. Claims 8 and 20 are rejected under 35 U.S.C. 103(a) as being unpatentable over Silverbrook et al. in view of Hatta, as applied to claims 1-2 and 10 above, and further in view of Winter et al. and Shinohara et al.

With respect to claims 8 and 20, Silverbrook et al. in view of Hatta discloses a method of printing as mentioned above except for the ability to turn off a color calibration feature. However, Winter et al. teaches a method of printing which includes a color calibration or a “no adjustment” option (Winter et al., col. 5, lines 14-21). It would have been obvious to combine the teaching of Winter et al. with the printing method disclosed by Silverbrook et al. in view of Hatta for the advantage of correcting color information to produce a more accurate image. Shinohara et al. teaches the provision of a control panel 200 on a printer for the input of color information. It would have been obvious to combine the teaching of Shinohara et al. with the printer disclosed by Silverbrook et al. in view of Hatta and Winter et al. for the advantage of allowing the operator to make color adjustments at the printer as they view the printing.

7. Claims 9, 19 and 23-24 are rejected under 35 U.S.C. 103(a) as being unpatentable over Silverbrook et al. in view of Hatta, as applied to claims 1-2 and 10 above, and further in view of Suga.

With respect to claims 9 and 19, Silverbrook et al. in view of Hatta discloses the printing process as mentioned above except for the step of deactivating a “clean platen feature.” However, Suga discloses a printer that is provided with a platen-cleaning member 17 and can operate in a platen-cleaning mode. Thus when the printer is in the normal recording mode, the platen-cleaning mode would be disabled. It would have been obvious to combine the teaching of Suga with the method of printing disclosed by Silverbrook et al. in view of Hatta for the advantage or maintaining the platen in a clean state so that undesired markings are not formed on a printing medium.

With further respect to claim 19, while it is not known if Clark discloses deactivating a cleaning feature *prior* to loading the print medium, it is well-known in general to load print medium to a printer as it is needed. There does not appear to be any criticality to the order of the steps of loading print medium and deactivating or activating a platen cleaning step.

With respect to 23, Silverbrook et al. discloses a method of printing with a large format printer except for the side to be printed on facing the take-up core and except for deactivating a “clean platen” feature by using a front panel. Silverbrook et al. discloses the method including the steps of feeding a roll paper from a feed spool 40 to a take-up spool 42 while driving the spools with a motor and gearbox assemblies 44 (Silverbrook et al., col. 7, lines 32-39). As best shown in Figures 12 and 26, Silverbrook et al. discloses that the supply spool rotates in a clockwise direction (Figure 12) and that the take-up spool rotates in a counter-clockwise

direction (Figure 26). The leading edge of the paper must be advanced through the printer and inserted into the take-up spool in order for the printer to function. Furthermore, although Silverbrook et al. does not explicitly disclose that a curl in the paper is removed by the printing process, it is inherent that a certain amount of curl will be removed when the paper is unwound in one direction and rewound in the opposite direction. The actual amount of roll-set curl removed would depend on many factors including the type of paper used, and the humidity of the environment. One of ordinary skill in the art would recognize when these factors needed to be adjusted so that a desired amount of roll-set curl is removed. Hatta discloses a printer in which a print head 1 is used to print on both sides of a printing medium 4 (see last sentence of machine translation). Figures 1 and 3 of Hatta show how a take-up spool can be arranged so that both sides are printed, thus both sides of medium 4 are to be printed upon and one of the sides to be printed on will always face the take-up core. Silverbrook et al. discloses a front panel 57 as a user interface on the front of the large format printer. It is not known to the examiner if the power switch is located in this position, but it would have been obvious to place the power switch in this location since a user interface is already located there.

It would have been obvious to combine the teaching of Hatta with the method disclosed by Silverbrook et al. for the advantage of printing on both sides of the printing medium, therefore reducing the amount of printing medium needed.

Suga discloses a printer that is provided with a platen-cleaning member 17 and can operate in a platen-cleaning mode. Thus when the printer is in the normal recording mode, the platen-cleaning mode would be disabled. Silverbrook et al. discloses a front panel 57 as a user interface. It would have been obvious to combine the teaching of Suga with the method of



printing disclosed by Silverbrook et al. in view of Hatta for the advantage or maintaining the platen in a clean state so that undesired markings are not formed on a printing medium. It would have been obvious to locate the "clean platen" feature control on the front panel 57 for the advantage of allowing a user to clean the platen when it is visually noted that the platen is dirty.

With respect to claim 24, Figures 25A and 25B of Silverbrook et al. show a cutting device used for cutting the print medium.

8. Claims 11 and 13-15 are rejected under 35 U.S.C. 103(a) as being unpatentable over Silverbrook et al. in view of Hatta, as applied to claims 1-2 and 10 above, and further in view of Ishida.

With respect to claim 11, Silverbrook et al. in view of Hatta discloses the claimed method of printing except for the step of removing the first core and placing the first core on a spindle for printing on a second side. However Ishida teaches a printer in which a supply roll 3 and a take-up roll 5 are rotated in opposite directions and in which the take-up roll 5 is removed from the take-up position and put in the supply box 4 so that a second side of the print medium is printed on (see paragraph [0008] of the machine translation of Ishida). Although Ishida does not disclose placing the first core onto a spindle, this feature is well-known mechanical expedient for unwinding printing medium as is shown by supply shaft 42 in Figure 4 of Silverbrook et al.

With respect to claim 13, both Silverbrook et al. and Ishida disclose a printing method which winds the material being printed on a core. While it is not known to the examiner if Ishida reuses a core or provides an additional core in the printing of the second side or the print media, it would have been obvious that such a core (old or new) is required.

With respect to claims 14-15, the step recited is simply a repetition of previously recited steps. It would have been obvious to repeat these known steps as many times as is required by the user.

9. Claim 12 is rejected under 35 U.S.C. 103(a) as being unpatentable over Silverbrook et al. in view of Hatta and Ishida as applied to claim 11 above, and further in view of Takayama et al.

Silverbrook et al. in view of Hatta and Ishida discloses the claimed printing method except for the step of electronically switching the order of the plot stream. However, Takayama et al. discloses a printer that allows a user to change the orientation of an electronic image using a control panel 28 with a template ROM 27 (Takayama et al., col. 7, lines 36-46). It would have been obvious to combine the teaching of Takayama et al. with the method of printing disclosed by Silverbrook et al. in view of Hatta and Ishida for the advantage of allowing a user to modify an input image such as by trimming, enlargement, and orientation changes so that the desired printed image is obtained.

10. Claim 25 is rejected under 35 U.S.C. 103(a) as being unpatentable over Silverbrook et al. in view of Hatta and Yamada et al.

Silverbrook et al. discloses a method of printing with a large format printer except for the side to be printed on facing the take-up core and except the step of rotating the core of the TUR without printing. Silverbrook et al. discloses the method including the steps of feeding a roll paper from a feed spool 40 to a take-up spool 42 while driving the spools with a motor and gearbox assemblies 44 (Silverbrook et al., col. 7, lines 32-39). As best shown in Figures 12 and

26, Silverbrook et al. discloses that the supply spool rotates in a clockwise direction (Figure 12) and that the take-up spool rotates in a counter-clockwise direction (Figure 26). The leading edge of the paper must be advanced through the printer and inserted into the take-up spool in order for the printer to function. Furthermore, although Silverbrook et al. does not explicitly disclose that a curl in the paper is removed by the printing process, it is inherent that a certain amount of curl will be removed when the paper is unwound in one direction and rewound in the opposite direction. The actual amount of roll-set curl removed would depend on many factors including the type of paper used, and the humidity of the environment. One of ordinary skill in the art would recognize when these factors needed to be adjusted so that a desired amount of roll-set curl is removed. Hatta discloses a printer in which a print head 1 is used to print on both sides of a printing medium 4 (see last sentence of machine translation). Figures 1 and 3 of Hatta show how a take-up spool can be arranged so that both sides are printed, thus both sides of medium 4 are to be printed upon and one of the sides to be printed on will always face the take-up core.

Yamada et al. teaches winding a paper sheet 20 in a printer into a roll without printing (see English abstract). It would have been obvious to combine the teaching of Yamada et al. with the method disclosed by Silverbrook et al. in view of Hatta for the advantage of positioning an image printed on the inner side of a roll to the outer side of the roll for identification or inspection purposes.

11. Claim 28 is rejected under 35 U.S.C. 103(a) as being unpatentable over Silverbrook et al. in view of Hatta and Yamada et al, as applied to claim 25 above, and further in view of Suga.

Silverbrook et al. in view of Hatta and Yamada et al. discloses the printing process as mentioned above except for the step of deactivating a “clean platen feature.” However, Suga discloses a printer that is provided with a platen-cleaning member 17 and can operate in a platen-cleaning mode. Thus when the printer is in the normal recording mode, the platen-cleaning mode would be disabled. It would have been obvious to combine the teaching of Suga with the method of printing disclosed by Silverbrook et al. in view of Hatta for the advantage or maintaining the platen in a clean state so that undesired markings are not formed on a printing medium. Silverbrook et al. discloses a front panel 57 as a user interface on the front of the large format printer. It would have been obvious to located the “clean platen” feature control on the front panel 57 for the advantage of allowing a user to clean the platen when it is visually noted that the platen is dirty.

*Allowable Subject Matter*

12. Claims 26-27 are objected to as being dependent upon a rejected base claim, but would be allowable if rewritten in independent form including all of the limitations of the base claim and any intervening claims.

13. The following is a statement of reasons for the indication of allowable subject matter:

Claims 26-27 have been indicated as containing allowable subject matter primarily for including the steps of rotating the first core of the TUR in a an opposite direction of the print medium roll without printing and placing the wound print medium on the first core onto a spindle of the printer and winding the wound print medium from the first core to a second core while printing.

*Response to Arguments*

14. Applicant's arguments filed 7/3/03 have been fully considered but they are not persuasive of any error in the above grounds of rejection.

Regarding claim 1, while applicant recites "removing roll-set curl" in the preamble of the claim, applicant has not recited any steps that achieve this purpose in the body of the claim. Instead the preamble only appears to recited an intended use or purpose. See MPEP § 2111.02. Since applicant has not positively recited any steps in the body of the claim the language regarding the removal of curl it is not considered as required by the claim.

With respect to applicant's arguments regarding "advancing said rolled print medium. . . until a front edge of said rolled print medium is adjacent the TUR," while this limitation is not explicitly recited in the references, it appears that such a step would be required in order to achieve the printer and print medium arrangement shown in the Figures of Silverbrook et al.

Similarly, while the references do not make explicit note of which direction the paper faces with respect to the TUR, the Figures of Silverbrook show the arrangement as mentioned in the above prior art rejection.

With respect to applicant's argument regarding the Hatta reference, the examiner disagrees with applicant's assertion that Hatta does not teach printing on both sides of the roll sheet 4. Applicant makes reference to paragraph 9 of the machine translation which states "only one side of the field is used" and that the costs are high. Applicant's attention is invited to the beginning of paragraph 9 of the machine translation which includes the heading "Problem(s) to be Solved by the Invention." This is a portion of Japanese patents which states the problems or deficiencies of the prior art. The invention in the patent is designed to overcome these problems

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or deficiencies. Applicant's attention is further invited to the last two sentences of paragraph 19 of the machine translation which states, "as for the roll sheet 4 rolled round by the take-up spool 6, the outside field is in the state of a blank paper. For this reason, it becomes possible to use it again, setting to the form electrode holder 5 of the roll sheet 4 removed from the take-up spool 6."

Additionally, in the last sentence of paragraph 20 of the machine translation, which is entitled, "Effect of the Invention," Hatta discloses that "the field of both sides of a roll sheet can be used." While the English of the machine translation is not good, it appears clear to the examiner that Hatta teaches printing on both sides of a roll paper. A human translation of the reference will be requested for clarification.

Thus with respect to applicant's further arguments regarding the validity of the combination of the Silverbrook and Hatta references, since the examiner believes that Hatta teaches printing on both sides of the roll paper, the references in the combination are not discordant with one another and therefore the combination is proper.

With respect to applicant's arguments regarding MPEP § 2143.01, it is noted that the prior art is not required to explicitly state the desirability of the claimed invention. This section of the MPEP also states that an implicit suggestion or knowledge of one of ordinary skill in the art can be used in determining motivation for combinations. These are the factors used in the combinations of the above prior art rejection.

15. Any inquiry concerning this communication or earlier communications from the examiner should be directed to Dan Colilla whose telephone number is (703) 308-2259. The examiner can normally be reached M-F, 8:30-5:30. Faxes regarding this application can be sent to (703) 746-4405.

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If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Andrew Hirshfeld can be reached at (703)305-6619. Any inquiry of a general nature or relating to the status of this application or proceeding should be directed to the receptionist whose telephone number is (703) 308-0956.

September 25, 2003



Dan Colilla  
Primary Examiner  
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